

CIRCULAR INTERSECTIONS

Circular intersections are a type of intersection characterized by a circular layout with a small center circle that is mountable and can be driven over. All traffic entering the circle yields to traffic on their left and turns right to travel counter clockwise around the circle. Regular cars and pickup trucks travel around the center circle, while larger trucks, trailers, and buses can drive over the center circle as needed.

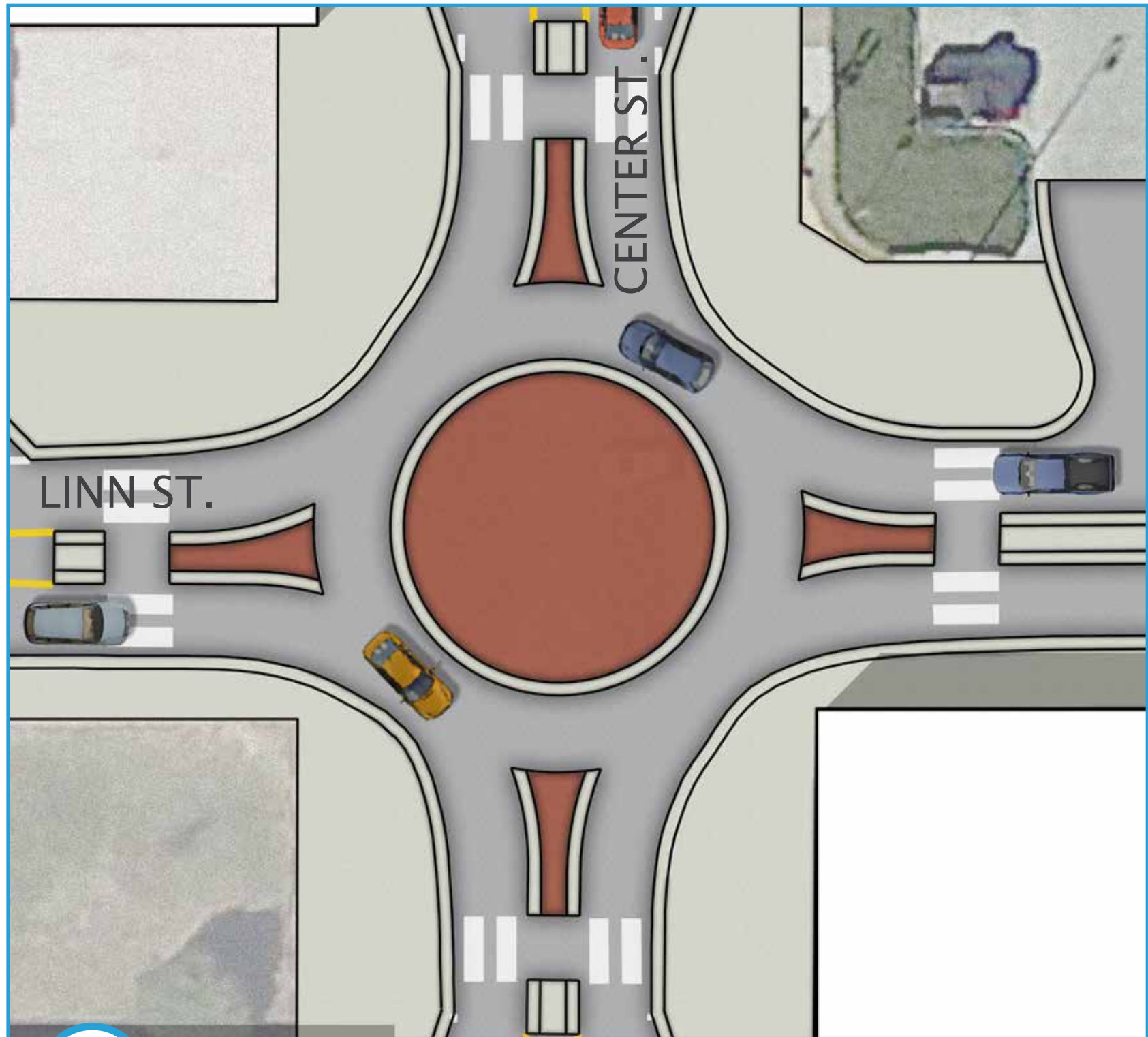
Circular intersections improve safety by reducing the number of conflict points at the intersection from 32 to 8. Replacing a traffic signal with a circular intersection can reduce all crashes by 20% and injury related crashes by 65%.



EXISTING CHURCH ST. / CENTER ST. INTERSECTION

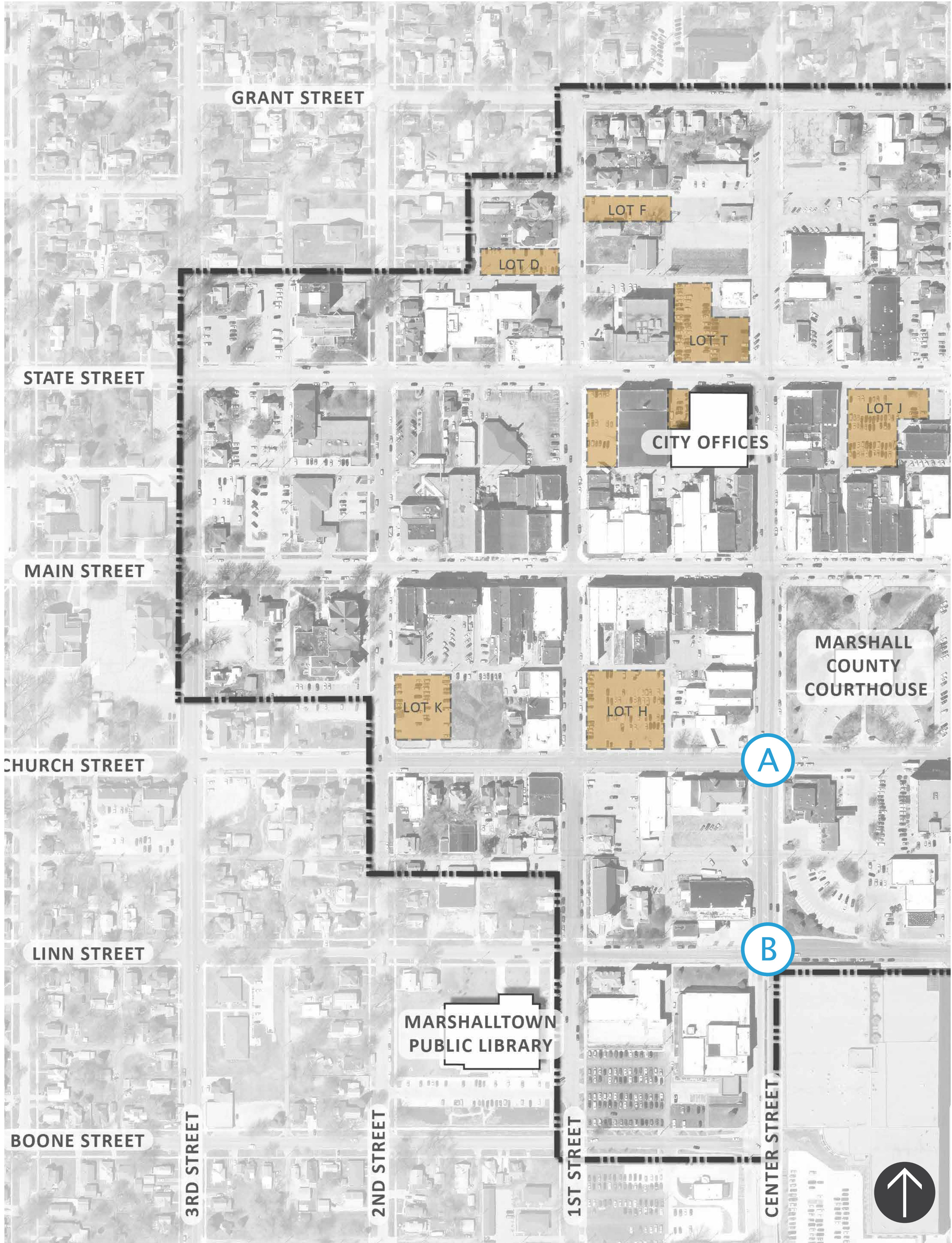


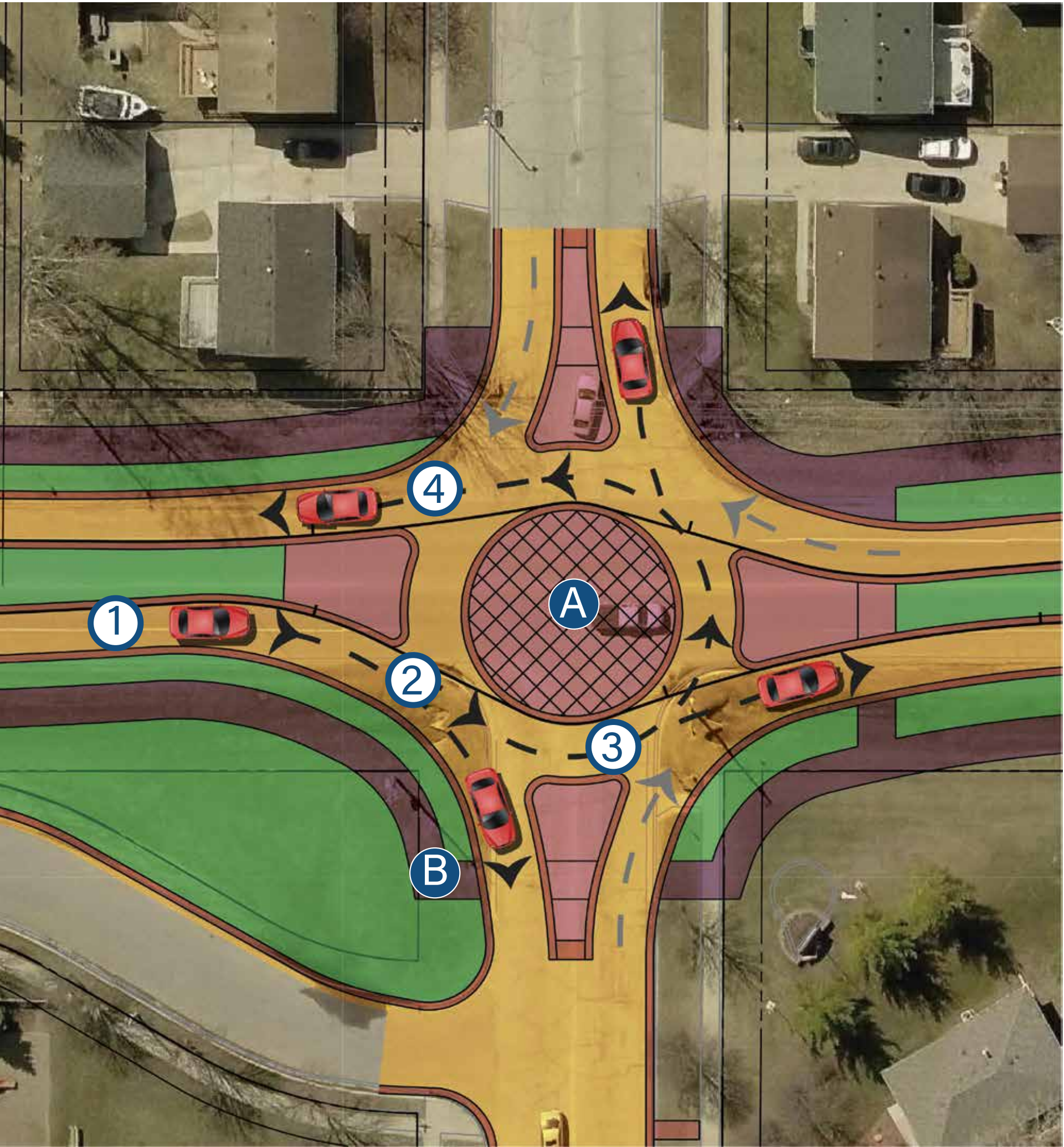
A CHURCH + CENTER INTERSECTION



B LINN + CENTER INTERSECTION

- ON-STREET PARKING, BUMPOUTS, DRIVE OVER CENTER TO ACCOMMODATE TURNING MOVEMENTS FOR LARGER VEHICLES
- SHORT CROSSING DISTANCES, PEDESTRIAN REFUGE SPACE





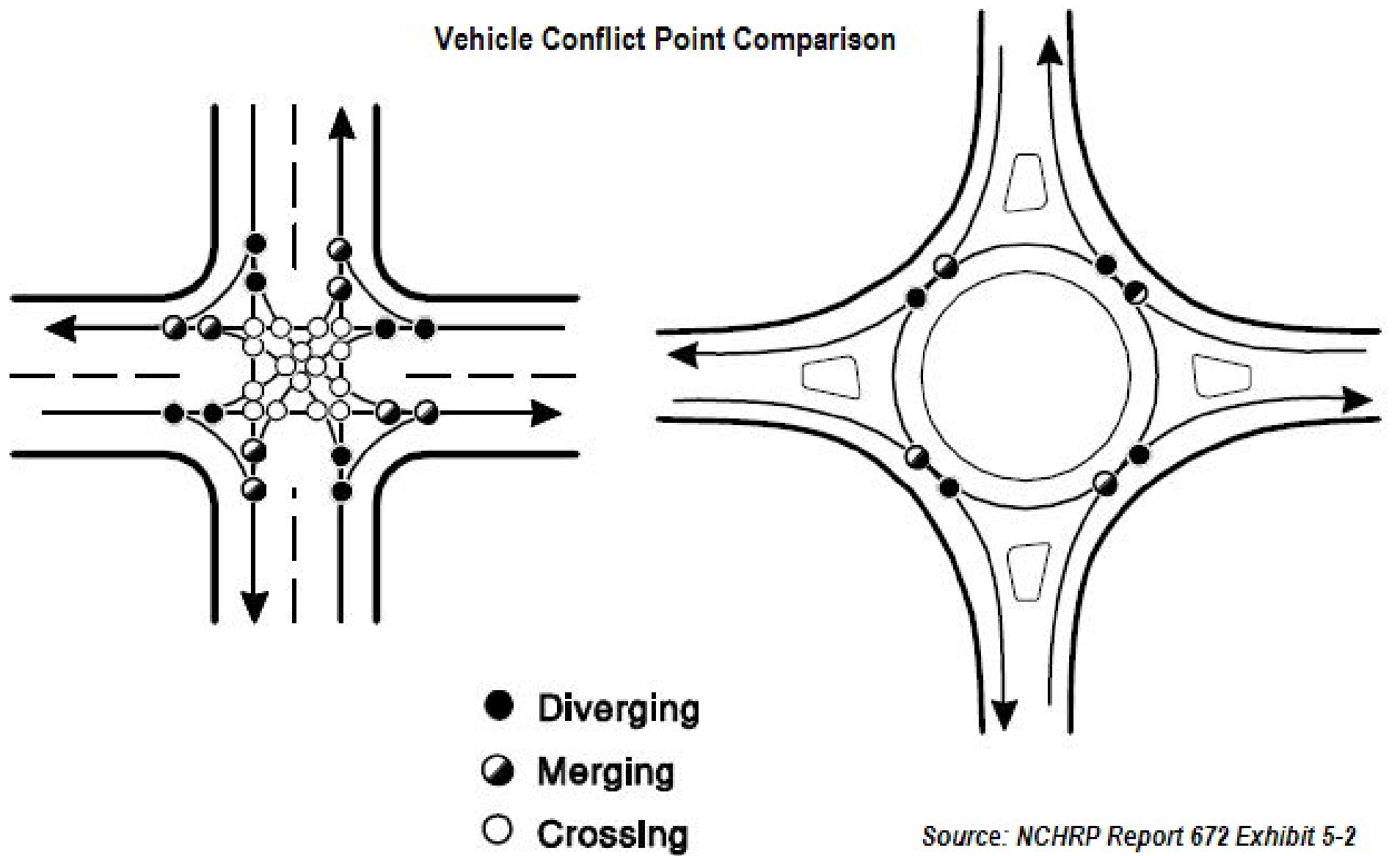
A **circular intersection** is a type of intersection that can be used in constrained locations in place of stop-controlled or signalized intersections to help improve safety and reduce delays. Generally, a circular intersection is small enough to be constructed within the existing intersection.

Navigating a Circular Intersection

- 1 **Approach:** Slow down and stop for pedestrians in the crosswalk.
- 2 **Enter:** Yield to vehicles approaching from the left, yield to all large vehicles including trucks, buses and emergency vehicles.
- 3 **Proceed:** Continue through the circular intersection until you reach your street. Never stop for other cars while in the circular intersection.
- 4 **Exit:** When exiting the circular intersection, stop for pedestrians in the crosswalk.

Key Characteristics

- A **Center Island:** Mountable/traversable for larger vehicles. If a larger vehicle is on another approach with their turn signal on, do not enter the circular intersection. Larger vehicles will use the entire intersection to complete their movement.
- B **Crosswalk:** Reduces number of conflict points for pedestrians crossing. pedestrians should always look in the direction of approaching traffic to make sure cars stop before crossing. Cross one lane at a time.



Comparison Matrix of Intersection Control Options for Center Street & Church Street & Linn Street

✓
Positive

—
Neutral

✗
Negative

\$ ↔ \$\$\$\$
Low High

Option	Pedestrian Safety Impact	Vehicle Crash Reduction Impact	Driver Delay	Pedestrian Delay	Cost	Notes
Signal 	✓	—	✗	✗	\$\$\$\$	<ul style="list-style-type: none">Stops traffic and provides light to tell pedestrians for when it's okay to cross.Waiting for light increases delay for pedestrians.Can create traffic congestion, add travel time, and frustrate drivers.Over 50% of crashes at intersections are broadside/T-bone crashes. A signal does not address these types of crashes.
Circular Intersection 	✓	✓	✓	✓	\$\$c	<ul style="list-style-type: none">50% less conflict points for vehicles and pedestrians when compared to a signal.Significantly reduces broadside/T-bone crashes at intersection.Narrows pedestrian crossing distance and allows pedestrians to cross one lane of traffic at a time.Pedestrian delay is less with the number of sufficient gaps anticipated.Slows traffic turning in intersection compared to signal or two-way stop condition.Decreases delay and backups for vehicles at all approaches.



CIRCULAR INTERSECTION PRECEDENT EXAMPLE